Attachment 11
Program Preferences

Submit a discussion on how the Proposal assists in meeting the Program Preference(s) described in Guidelines, Section II.F http://www.water.ca.gov/irwm/guidelines.cfm. The discussion must identify the specific Program Preference(s) that the Proposal will meet; the certainty that the Proposal will meet the Program Preference(s); and the breadth and magnitude to which the Program Preference(s) will be met. Meeting the Program Preference(s) identified by the applicant will become a condition of the grant agreement in the event that the Proposal is awarded grant funding. Include graphics or maps as necessary to demonstrate how your proposal meets the preferences.

The San Ramon Canyon Stormwater Flood Reduction Project meets the following Program Preferences described in Guidelines, Section II.F:

1) ***Practice Integrated Flood Management.*** The San Ramon Canyon Stormwater Flood Reduction Project promotes and practices integrated flood management as follows:

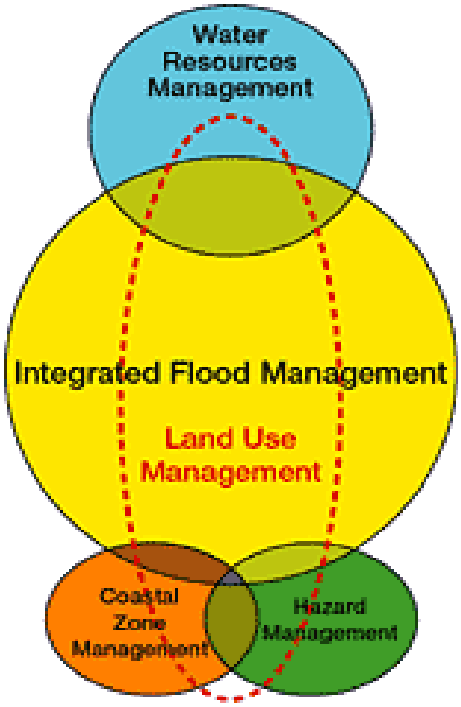

Figure 1 – Integrated Flood Management integrates land and water resources development while maximizing the use of floodplains and minimizing loss of life. (Figure source: World Meteorological Organization)

1.1 Regional Project. Integrated flood management promotes an integrated, rather than fragmented, approach to flood management. In other words, to look at events from a regional perspective and employ regional solutions. To that end, it is important to note that this Project is a regional project located on the border of the City of Rancho Palos Verdes, Los Angeles County, and the City of Los Angeles, San Pedro area (see Figures 2 and 3). All three entities have been working for several years to mitigate the stormwater events at PVDS/25th Street and in fact, on December 4, 2009, a three-way cooperation letter was signed by all three government agencies (see Appendix A) expressing their commitment to work cooperatively to resolve the issues at PVDS/25th Street. The Project itself will be located within the City of Rancho Palos Verdes; however the Project will:

- Protect over 500 senior citizens and 242 mobile homes located in the City of Los Angeles;
- Eliminate clean-up efforts that are the responsibility of the City of Los Angeles;
- Improve recreational access that is owned by Los Angeles County;
- Improve water quality to the Santa Monica Bay/Pacific Ocean, which impacts the entire region and its ability to meet Clean Water standards;
- Improve traffic circulation for all who use PVDS/25th Street in their daily commute. This includes commuters to the Ports of Los Angeles and Long Beach, which are located just 3.5 and 8.4 miles, respectively from the project site. Commuters to Marymount College, the Federal Aviation Administration communications center the U.S. Coast Guard Facility will also see improved commute times (during storm events) as a result of this Project.

Figure 2 – Project is located at the border of RPV, City of Los Angeles, and Los Angeles County and requires coordinated efforts on three parties.

Figure 3 – San Ramon Project Location.

The Project also effectively integrates a water management project within the South Coast hydrologic region identified in the California Water Plan as well as in the Greater Los Angeles Integrated Regional Water Management Area (GLAC IRWM). The GLAC IRWM is a collaborative effort to manage all aspects of water resources in the region. IRWM crosses jurisdictional, watershed, and political boundaries; involves multiple agencies, stakeholders, individuals, and groups; and attempts to address the issues and differing perspectives of all the entities involved through mutually beneficial solutions. The Project is a stand-alone proposal developed in conjunction with the City of Los Angeles flood-risk reduction objectives, surface (ocean) water quality goals (sediment TMDL anticipated from LA RWQB), and infiltration (LID) practices.

The City has also partnered with the Army Corps of Engineers (ACOE) to develop a workable solution to the problems caused by the Canyon. The Los Angeles District's Chief of the Civil Works Branch, David Van Dorpe, has visited the project site area and is a supporter of the Project.

And finally, the Project will improve regional circulation during storm events. Currently, storm water runoff from rain events causes the closure of PVDS/25th Street approximately three to four times per year. PVDS/25th Street is a principal arterial roadway for both Rancho Palos Verdes and the City of Los Angeles and therefore the closures significantly impact the mobility of

residents and emergency personnel. The road closures also impact the ability of several world-class businesses, such as Trump National Golf Course and the 5-star rated Terranea Resort, from attracting potential local and regional guests.

The proposal to construct an alternative storm drain system to capture and redirect overflow storm water will affect this program preference in a positive manner. It is expected that no road closures will occur once the project has been completed. Additionally, both cities spend well in excess of $165,000 per year to clean up the repeated mud and debris flows that clog the street. This amount is expected to decrease to $0 spent upon completion of the Project. The City of Rancho Palos Verdes can say with 100 percent certainty that this goal will be achieved upon completion of the Project.

1.2 ***Minimize Loss of Life and Protect Property***. The construction of the Project will minimize the threat of loss of life and protect property for over 500 residents living in 242 homes that reside below PVDS/25th Street. The mobile home park is located in the City of Los Angeles. During current rain storms, flooding occurs at a garden wall that separates the street from the Palos Verdes Mobile Home community. At a certain level the water and debris circumvents the wall and flows down through V-ditches into the community's streets. On one occasion, an elderly gentleman was stuck in his car due to flood waters and had to be rescued by another vehicle. His car was a total loss. The City of Rancho Palos Verdes anticipates that no flooding will occur in this community once the storm drain is constructed.

Figure 4 – Inside Palos Verdes Shores Mobile Home Park. Mud, water, debris, and large rocks find their way into the mobile home park by traveling through a V-ditch at one end of the block wall.

Figure 5 – Additional view of rocks and storm water debris. Mobile homes are in background. Notice elevation change.

1.3 Better Emergency Preparedness and Response. As mentioned previously, the flooding events at San Ramon Canyon close PVDS/25th Street, a principal arterial roadway, approximately three times per year. These closures severely restrict emergency personnel from accessing the area. With completion of the San Ramon Canyon Stormwater Flood Reduction project, the City of Rancho Palos Verdes is confident that no road closures will take place as a result of storm water flooding.

2) Protect Surface and Groundwater Quality. The construction of the San Ramon Stormwater Flood Reduction project will primarily manage storm water runoff to reduce flood damage in the area. However, the project will also improve water quality by substantially reducing erosion and minimizing debris transport. Construction of a mid-canyon inlet and bypass pipeline will divert moderate-to-heavy "clear water" runoff upstream of highly-erosive areas (see Figure 6). The restoration and stabilization of the streambed below this inlet will also reduce erosion and minimize debris transport allowing "clear water" to flow directly to the ocean in the existing pipeline.

Figure 6 – San Ramon Canyon proposed mid-canyon inlet and pipeline.

The construction of the preferred alternative will also address water quality specifically related to first flush flows. The following was provided by Harris and Associates as part of the development of the Project Study Report:

> "Although a significant amount of the project flows are from natural canyon runoff there are also residential roadways and PVDE runoff that are tributary along the top of the ridge. Presently, the "first flush" flows from the streets above are absorbed into the pervious natural canyon invert, which essentially eliminates the need for related water quality treatment systems to protect the runoff to the ocean. Further, as part of any design alternative pursued, a low-flow diversion

> system will be incorporated into the mid-canyon inlet structure to allow "first flush" flows and other low flows to be conveyed to the natural canyon downstream so that the canyon creek bed does not become completely dry. Methods of interception of sediment and debris will also be reviewed as part of the design of the upstream inlet structure, with more stringent requirements for collection applying to any alternative outletting the County of Los Angeles storm drain in 25th Street. However, natural sediment that is generated by the canyon is not a pollutant, which is why any alternative outletting directly to the beach will allow "bulked" flows to pass. For the new beach outlet alternatives the conveyance of natural canyon sediment will reduce the amount of maintenance and debris removal required at the mid-canyon inlet structure."

And finally, during the development of this grant application, the City of RPV consulted with Ms. Susan Dworsky, Environmental Compliance Specialist familiar with the project site and its environmental habitat. Ms. Dworsky was asked to provide her professional opinion on how the preferred project would improve water quality. The following was provided by Ms. Dworsky:

> "In the City of Rancho Palos Verdes (City), the San Ramon Canyon provides natural drainage for a residential and open space area at the southeastern border of the City. Currently, landslide-induced rock and soil deposits in the Canyon bottom are being transported by moderate and heavy rainfall events down the canyon and into the receiving Santa Monica Bay. The effects of sediment in stormwater runoff on receiving water quality are both environmentally and economically costly. Sediment laden runoff can adversely affect water quality physically, chemically, and biologically. The sediment that is transported by stormwater runoff can carry organic matter, animal wastes, heavy metals, nutrients and pesticides. All of these pollutants bind to sediment particles and can pose significant threats to the quality of downstream waters. Substantial impacts from heavy sediment loading can range from direct effects on aquatic ecosystems, such as increased turbidity and algal blooms, to indirect threats to human health from toxic materials accumulating in fish tissue. The myriad effects on water quality from sediment-laden runoff can introduce aquatic biota and public health concerns resulting in substantial impacts for municipalities both presently and in the future. The San Ramon Canyon Stormwater Flood Reduction Project will help alleviate environmental consequences by reducing sediment flow (and associated pollutants) to the Santa Monica Bay and Pacific Ocean."

The photos below show the volume of clay and silted sediments that are regularly transported to the ocean or deposited on PVDS/25thStreet. Please note the depth of the sedimentation and the heavy machinery used to remove the sediment and biological debris to the landfill.

Figure 7 - More than a foot of mud and sludge can be deposited after a typical storm event.

Figure 8 - Another view of the extent of debris.

The City of Rancho Palos Verdes can say with 100 percent certainty that erosion and sedimentation runoff will be reduced significantly with construction of this project. In addition, water quality discharging to the ocean will be improved.

3. Expand Environmental Stewardship (A Statewide Priority) – The San Ramon Canyon Stormwater Flood Reduction Project will improve and expand environmental stewardship to protect and enhance the environment through the following:

3.1 Re-vegetation. The proposed project will enhance open space and recreation by restoring the natural area down steam of the mid-canyon inlet structure, which is approximately 1.61 acres. Anticipating CEQA requirements, habitat will actually be restored to three times the acreage, or 4.83 acres. Re-vegetation of the streambed and affected canyon slopes with native vegetation will be conducted. Re-vegetation activity will include a plant palette, consistent with the Resource Agency and Native Plant Society criteria, that lists exact species of plants to be restored and the native plants to be used derived from local genetic sources. The City of Rancho Palos Verdes will partner with the Palos Verdes Peninsula Land Conservancy to conduct this work (see Appendix B).

3.2 Enhanced Open Space and Recreation. The City will also restore and improve the casual trail that exists from PVDS to the bluff top (approximately 1,700 ft. x 20 ft = 34,000 sq. ft.), creating a "gateway" to this open space parcel. The trail will lead from the roadside parking area to the bluffs overlooking the ocean and provide access to informal bluff trails to the beach. The City is also in the process of evaluating the development of a trail through the project area to connect Shoreline Park with Friendship Park. This activity will be measured at the conclusion of construction by City personnel who will visually confirm/measure acreage restored, plants used, and confirm that 34,000 sq. ft. of trail was created.

Figure 9 – Expanding environmental stewardship is a hallmark of the proposed Project.

3.3 More Sustainable Flood Management System. As noted above, construction of a mid-canyon inlet and bypass pipeline will provide a more sustainable flood management system by reducing sediment flow and diverting moderate-to-heavy "clear water" runoff upstream of highly-erosive canyon walls. The canyon restoration below this inlet will reduce erosion and minimize debris transport allowing "clear water" to flow directly to the ocean in the existing pipeline. The inlet will also provide for a low-flow bypass to direct smaller flows and "first flush" through the restored streambed in the canyon, taking advantage of infiltration and biologic pollutant uptake available in a riparian system.

3.4 Natural Community Conservation Plan (NCCP). The City of Rancho Palos Verdes has anticipated the need to repair or improve drainage systems in several canyon areas throughout the City and has realized that these drainage projects would necessitate work in potentially sensitive habitat areas. Thus they established a citywide Natural Community Conservation Plan (NCCP). This plan identified biological resource areas and established habitat preserves, such as the Palos Verdes Shoreline Park / Open Space site (south of 25th Street / PVDS and west of San Pedro / CLA). It was estimated that these future City drainage improvement projects would result in a cumulative combined loss of 10-acres of Coastal Sage Scrub (CSS) habitat and 24-acres of non-native grassland. This anticipated loss has already been mitigated through dedication of City property, resulting in 30-acres of offsite CSS mitigation and 12-acres of offsite non-native grassland mitigation. The City of Rancho Palos Verdes is confident that the San Ramon Canyon project will further meet the statewide priorities of expanding environmental stewardship and practicing integrated flood management.

Appendices

Appendix A

Three-way cooperation letter (City of Rancho Palos Verdes, City of Los Angeles, and Los Angeles County).

December 4, 2009

The Honorable Dana Rohrabacher
United State House of Representatives
2300 Rayburn House Office Building
Washington, D.C. 20515

Electronic Mail Delivery to:
Dana Randazzo
dana.randazzo@mail.house.gov

Subject: Palos Verdes Drive East and Palos Verdes Drive South Roadway Stabilization Project

Dear Congressman Rohrabacher:

We are writing to you today to express our collective commitment to work together to ensure that Palos Verdes Drive East and Palos Verdes Drive South remain safe and viable transportation routes for the Los Angeles County basin. Thank you for including this project in your "program of projects" submitted to the House Transportation and Infrastructure Committee for the reauthorization of SAFETEA-LU. Your support is greatly appreciated!

As you may recall from your site visit in September, the mitigation work necessary to remedy the safety problem at the project site is beyond the financial capability of either City or the County alone. Based upon your recommendation and the urgency of this project, the County of Los Angeles, City of Los Angeles, and the City of Rancho Palos Verdes are cooperating to work out a financial partnership, which will reduce the federal transportation funding request from 80 percent federally funded ($15.6 million) to 50 percent federally funded ($9.75 million). The total project cost is $19.5 million.

As the local elected officials representing the project site area and the constituents who will benefit from this project, we thank you for your commitment to the region and trust you will not hesitate to call on us if you have questions or need additional information.

Our warmest regards,

Don Knabe, Chairman Supervisor Los Angeles County	Janice Hahn, District 15 Councilwoman City of Los Angeles	Steve Wolowicz Mayor City of Rancho Palos Verdes

cc: James Schmidt, Legislative Director, Congressman Dana Rohrabacher

Appendix B

Palos Verdes Peninsula Land Conservancy Letter.

PALOS VERDES PENINSULA LAND CONSERVANCY

PRESERVING LAND AND RESTORING HABITAT FOR THE EDUCATION AND ENJOYMENT OF ALL

March 25, 2011

Mr. Mark Cowin
Director
Dept. of Water Resources
1416 9th Street, Room 1115-1
Sacramento, CA 95814

Re: Prop 1E Stormwater Flood Management Grant (SWFM)
City of Rancho Palos Verdes – San Ramon Canyon Stormwater Flood Reduction Project

Dear Mr. Cowin:

On behalf of the Palos Verdes Peninsula Land Conservancy (Conservancy), I am writing to express my support for the City of Rancho Palos Verdes' efforts to secure funding from Prop 1E Stormwater Flood Management Grant program to help reduce stormwater runoff from the San Ramon Canyon. Funding is needed to reduce flooding and debris flow that threatens streets and homes, as well as to reduce instream erosion and sedimentation, restore natural habitat, and improve water quality issuing into the ocean.

The mission of the Conservancy is to preserve undeveloped land as open space for historical, educational, ecological, recreational and scenic purposes. The Conservancy works cooperatively with the four cities in which the preserved lands are located: Rancho Palos Verdes, Rolling Hills, Rolling Hills Estates, and San Pedro (City of Los Angeles). In collaboration with these cities, we hold voluntary conservation easements and manage the public open spaces.

The San Ramon Canyon area encompasses 187 acres (160 acres located in RPV) of open space canyon and watershed area. We are excited to work as a partner with the City of Rancho Palos Verdes during their comprehensive stormwater flood reduction project to improve habitat restoration that will better support wildlife in the area. The Conservancy's work will include seeding and planting of native species along with invasive plant control.

We hope that you will join us in supporting the City of Rancho Palos Verdes in their efforts to reduce stormwater runoff in San Ramon Canyon, while at the same time restoring important habitat.

Sincerely,

Andrea Vona

Andrea Vona
Executive Director
Palos Verdes Peninsula Land Conservancy

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